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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,251	12/02/2003	Ludwig Eberler	P03,0469	3538

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SCHIFF HARDIN & WAITE
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 6600 Sears Tower
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EXAMINER

MAYO, TARA L

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/726,251	EBERLER ET AL.	
	Examiner	Art Unit	
	Tara L. Mayo	3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

2. The indicated allowability of claims 12 and 13 is withdrawn in view of the newly discovered reference(s) to Heinhold et al. (U.S. Patent Publication No. 2002/0129446 A1), Reimann (U.S. Patent Publication No. 2002/0104163 A1), Carper et al. (U.S. Patent No. 4,727,328) and *Gradient Coils*. Rejections based on the newly cited reference(s) follow.

Claim Objections

3. Claims 1 and 6 are objected to because of the following informalities: misspelled words, inconsistent claim terminology.

In claim 1 on line 9, delete "grove" and insert therefor --groove--.

In claim 6 on line 3, delete "device" and insert therefor --installation--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The prior rejection of claims 1 through 11 under 35 USC §112, first paragraph as set forth in the last Office action have been overcome by the response filed 15 June 2005.

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5. Claims 10, 11 and 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the Specification fails to provide support for a medical device comprising a structural component that can be installed and removed (per Claim 1) in the form of a gradient system (per Claim 10). On page 5 at line 23 through page 6 at line 1, and further, on page 7 at lines 20 through 22, Applicant discloses the gradient system as a part of the medical installation (i.e., the magnetic resonance tomography device) and not the structural component (i.e., the body coil).

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1 through 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 1 on lines 9 through 10, it is unclear what is meant by "patient bed rail being adapted to receive said guide rail thereon." For the purpose of prosecution on the merits the Examiner has interpreted the claim as --said patient bed being adapted to receive said guide rail thereon--.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1 through 5, 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinhold et al. (U.S. Patent Publication No. 2002/0129446 A1) in view of Reimann (U.S. Patent Publication No. 2002/0104163 A1).

Heinhold et al. '446, as seen in Figures 1 and 3, show a device to install and remove a structural component (5) of a medical installation (15), said medical installation having a patient bed (10) separate from said structural component, said device comprising:

with regard to claim 1,

a two-part guide system attachable to said patient bed and to said structural component;

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a first of the two parts of said guide system comprising a guide rail (7; [0022]) and a second of said two parts of said guide system comprising a guide groove (formed by the flange of element 5 as seen in Figure 3), said patient bed being adapted to receive said guide rail thereon; and

said guide system, upon temporary, detachable placement of said structural component on said guide system on said patient bed, guiding said structural component by sliding along said guide rail relative to said medical installation;

with regard to claim 2,

wherein said guide groove is in said structural component;

with regard to claim 3,

wherein said structural component has a bearing support (the longitudinal flanges as seen in Figure 3) attached thereto, and wherein said guide groove is in said bearing support; and

with regard to claim 8,

wherein said medical device is a magnetic resonance tomography device ([0003]).

Heinhold et al. '446 fail to teach:

with regard to claim 1,

the patient bed being height adjustable;

with regard to claim 4,

the bearing support comprising plastic; and

with regard to claim 5,

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the guide system comprising an attachment element for attaching the guide rail to the patient bed.

Reimann '163, as seen in Figure 1, shows a support device for a medical installation comprising a height adjustable patient bed (15 via element 13; [0028]).

With regard to claim 1, it would have been obvious to one having ordinary skill in the art of patient beds at the time the invention was made to modify the device shown by Heinhold et al. '446 such that the bed would height adjustable as taught by Reimann '163. The motivation would have been for ease of use by medical personnel of various heights as well as patients having various body sizes.

With regard to claim 4, while Heinhold et al. '446 are silent with respect to the material of which the bearing support is comprised, it would have been obvious to one having ordinary skill in the art of magnetic resonance imaging at the time invention was made to make the bearing support of plastic. The motivation would have been to use a low friction, non-metallic material that would not interfere with the spectrometry of the medical installation.

With regard to claim 5, while neither Heinhold et al. '446 nor Reimann '163 teach an attachment element, it would have been obvious to one having ordinary skill in the art of patient beds at the time the invention was made to modify the device taught by the combination such that it would include an attachment element. The motivation would have been to secure the rails to the bed and stabilize them against displacement.

With regard to claim 12, the method steps recited therein are inherent to the installation or removal of the device taught by the combination of

11. Claims 6, 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinhold et al. (U.S. Patent Publication No. 2002/0129446 A1) in view of Reimann (U.S. Patent Publication No. 2002/0104163 A1) as applied to claims 1 and 8 above, and further in view of Carper et al. (U.S. Patent No. 4,727,328).

Heinhold et al. '446 as modified above by Reimann '163 further teach:
with regard to claim 6,

the guide rail being a first guide rail.

Heinhold et al. '446 as modified above by Reimann '163 fail to teach:
with regard to claim 6,

the guide system comprising a second guide rail mounted on the medical device that,
with appropriate positioning of the patient bed, forms an extension of the first guide rail;
with regard to claim 7,

the second guide rail comprising plastic;
with regard to claim 9,

the structural component being a radio-frequency body antenna of the magnetic resonance tomography device.

Carper et al. '328, as seen in Figure 1, show a medical installation (i.e., a Nuclear Magnetic Resonance imaging device) comprising a plastic guide rail (16 and 18; col. 3, lines 7

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through 9) that, with appropriate positioning of a patient table base (50), forms an extension for receiving a structural component (60) thereon (col. 3, lines 17 through 20), and further comprising a structural component (200) including a radio-frequency body antenna in form of a coil (250, 260).

With regard to claims 6 and 7, it would have been obvious to one having ordinary skill in the art of magnetic resonance imaging at the time the invention was made to further modify the combination disclosed by Heinhold et al. '446 and Reimann '163 such that the medical installation would include a plastic second guide rail as taught by Carper et al. '328. The motivation would have been to provide support to the structural component while in the medical installation.

With regard to claim 9, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device shown by the combination of Heinhold et al. '446 and Reimann '163 such that the structural component would comprise radio frequency antenna coils as taught by Carper et al. '328. The motivation would have been to provide the device with means for broadcasting and/or receiving radio frequency signals.

12. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heinhold et al. (U.S. Patent Publication No. 2002/0129446 A1) in view of Reimann (U.S. Patent Publication No. 2002/0104163 A1) as applied to claim 1 above, and further in view of *Gradient Coils*.

Heinhold et al. '446 as modified above by Reimann '163 fail to teach:
with regard to claim 10

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the structural component being a gradient system of the magnetic resonance tomography device.

Gradient Coils teaches the advantageous use of a gradient system in a magnetic resonance imaging device to permit localization of image slices.

With regard to claim 10, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device shown by the combination of Heinhold et al. '446 and Reimann '163 such that the structural component would comprise a gradient system as taught by *Gradient Coils*. The motivation would have been to provide the device with means for localizing image slices.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heinhold et al. (U.S. Patent Publication No. 2002/0129446 A1) in view of Reimann (U.S. Patent Publication No. 2002/0104163 A1), Carper et al. (U.S. Patent No. 4,727,328) and *Gradient Coils*.

Heinhold et al. '446, as seen in Figures 1 and 3, shows a magnetic resonance tomography device comprising:

with regard to claim 13,

a magnetic resonance scanner (15)

a patient bed (10) adapted to receive a patient thereon to move said patient into and out of said magnetic resonance scanner; and

a device for installing and removing a structural component relative to said magnetic resonance scanner, said device comprising a two-part guide system having a first part (7) attached to said patient bed and a second part (the flanges of element 5) attached to said structural component, said first part comprising a guide rail and said second part comprising a guide groove temporarily detachably engageable with said guide rail allowing said structural component, when placed on said patient bed, to be slid along said guide rail relative to said magnetic resonance scanner.

Heinhold et al. '446 fail to teach:

with regard to claim 13,

a height adjustable patient bed;

the structural component being a radio frequency body antenna; and

the device further comprising a gradient system.

Reimann '163, as seen in Figure 1, shows a support device for a medical installation comprising a height adjustable patient bed (15 via element 13; [0028]).

Carper et al. '328, as seen in Figure 1, show a medical installation (i.e., a Nuclear Magnetic Resonance imaging device) comprising a structural component (200) including a radio-frequency body antenna in form of a coil (250, 260).

Gradient Coils teaches the advantageous use of a gradient system in a magnetic resonance imaging device to permit localization of image slices.

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With regard to claim 13, it would have been obvious to one having ordinary skill in the art of patient beds at the time the invention was made to modify the device shown by Heinhold et al. '446 such that the bed would height adjustable as taught by Reimann '163. The motivation would have been for ease of use by medical personnel of various heights as well as patients having various body sizes.

With regard to claim 13, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device shown by Heinhold et al. '446 such that the structural component would comprise radio frequency antenna coils as taught by Carper et al. '328. The motivation would have been to provide the device with means for broadcasting and/or receiving radio frequency signals.

With regard to claim 13, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device shown by Heinhold et al. '446 such that the structural component would comprise a gradient system as taught by *Gradient Coils*. The motivation would have been to provide the device with means for localizing image slices.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tara L. Mayo whose telephone number is 571-272-6992. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571-272-6998. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tlm
21 July 2005


TARA L. MAYO
PATENT EXAMINER